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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/624,068

07/21/2003

Willem L. Repko

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EXAMINER

CHO, HONG SOL

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

10/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/624,068

Applicant(s)

REPKO ET AL.

Examiner

Hong Cho

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-14,16-18 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8,14,16-18 and 22-24 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 9-13 is/are rejected.
- 7) ☒ Claim(s) 16 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the amendment filed on 9/4/2007. Claims 3, 4, 15 and 19-21 were canceled. Claims 1, 2, 5-14, 16-18 and 22-24 are pending in the instant application.

Claim Objections

2. Claims 16 and 18 are objected to because of the following informality:

Re claims 16 and 18, they depend from the cancelled claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez) in view of Chu (US 5469466).

Re claims 1 and 2, Martinez discloses synchronizing local clocks of remote devices to reference clock of a broadcast station in data communication system by tuning to phase modulated signal (*recovering timing information in a packet network, where a*

modulated signal is used to transport additional information required for clock recovery between the sender and receiver across the network or to improve the accuracy of the recovered clock (in claim 14), column 3, lines 62-66). Martinez fails to disclose the modulated signal is in the form of rate of transmission of packets from the sender. Chu discloses generating timestamped packets at different time intervals (column 5, lines 53-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Martinez to implement the feature of varying the frequency of time-stamped modulated signal to get the desired amount of jitter for the benefit of determining the level of receiver jitter tolerance margin.

Re claim 9, Martinez discloses a phase locked loop at the receiver to detects the digital information (*remove timing errors arising between the last node in the path of a packet across the network and the receiver or in the last link of the network before the receiver* (in claim 24), column 5, lines 22-28).

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez in view of Chu and further in view of Hill (US 20040223559).

Re claims 10-12, Martinez discloses all of the limitations of the base claim, but fails to disclose the modulated signal being the summation of two sinusoidal waveforms. Hill discloses summing two modulation command sinusoidal waveforms (paragraph [0026], lines 1-4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Martinez to implement the

feature of summing two modulation command sinusoidal waveforms to determine the level of receiver jitter tolerance margin.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez in view of Chu and further in view of Wachter et al (US 5889490), hereinafter referred to as Wachter.

Re claim 13, Martinez discloses all of the limitations of the base claim, but fails to disclose modulated signal using pseudo-random modulation. Wachter discloses using pseudo-random modulation for a high resolution ranging (column 13, lines 46-48). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Martinez to implement pseudo-random modulation for modulating signal for the benefit of providing security in the transmission and reception of encoded information.

Response to Arguments

5. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

6. Claims 5-8, 14, 16-18 and 22-24 are allowed.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087.

The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hc

Hong Cho
Patent Examiner
9/24/07